

We claim:

1. A process for preparing a precious metal-containing support comprising:
 - 5 (a) bringing (i) at least one support material comprising SiH groups into contact with (ii) at least one precious metal compound and/or at least one precious metal particle for up to two hours to form a precious metal-containing support wherein the precious metal on the precious metal-containing support has a diameter in the range of from 0.01 to 10 nm; and
 - 10 (b) drying the precious metal-containing support.
2. The process according to Claim 1, wherein the at least one support material is an organic-inorganic hybrid material.
- 15 3. The process according to Claim 1, wherein the at least one precious metal compound and/or the at least one precious metal particle is selected from the group consisting of gold, silver, and a mixture of gold and silver.
- 20 4. The process according to Claim 1, wherein the contact time is less than 0.5 hour.
5. The process according to Claim 1, wherein the drying is carried out by a spray drying process or by a fluidized bed process.
6. The process according to Claim 1, wherein the at least one support material is thermally treated before and/or after contact with the at least one precious metal compound and/or the at least one precious metal particle.

7. A precious metal-containing support comprising:

(i) at least one support material comprising SiH groups; and

(ii) at least one precious metal compound and/or at least one precious metal particle;

wherein more than 50% of the precious metal in the precious-metal containing support has a diameter in the range of from 0.01 to 10 nm.

8. The precious metal-containing support according to Claim 7, wherein the at least one support material is an organic-inorganic hybrid material.

9. The precious metal-containing support according to Claim 7, wherein the at least one support material comprises silicon oxide.

10. The precious metal-containing support according to Claim 9, wherein the at least one support material comprises 0 to 20 mole % of titanium oxide, based on the amount of silicon oxide.

15. The precious metal-containing support according to Claim 9, wherein the at least one support material comprises 0 to 20 mole % of molybdenum oxide, based on the amount of silicon oxide.

20. 12. The precious metal-containing support according to Claim 9, wherein the at least one support material comprises SiH groups in a range between 0.01 and 80 mole %, based on the amount of silicon oxide.

25. 13. The precious metal-containing support according to Claim 7, wherein the at least one support material optionally comprises at least one promoter.

14. The precious-metal containing support of Claim 7, wherein the precious metal-containing support has catalytic activity.

30. 15. A process for the partial oxidation of a hydrocarbon in the presence of the precious-metal containing support of Claim 7, molecular oxygen, hydrogen, and optionally, other gases.

16. The process according to Claim 15, wherein the hydrocarbon is propene.
17. The process according to Claim 16, where propene is oxidized to propene oxide.
- 5 18. A precious metal-containing support according to Claim 7, wherein the precious metal-containing support is used for the oxidation of hydrocarbons.

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